CLAIMS

What is claimed is:

1. A method for performing biometric identity verification with improved accuracy, the method comprising the steps of:

scanning at least two biometric features of a user simultaneously, using at least two practically identical biometric scanners;

processing data from the at least two scanners in at least one processor, to obtain biometric data that uniquely identify the scanned biometric features; and

comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user;

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy and processing speed, at a lower cost than by using a single, larger biometric scanner.

2. A method for performing biometric identity verification with improved accuracy, the method comprising the steps of:

scanning at least two biometric features of a user simultaneously, using at least two practically identical biometric scanners;

processing data from the at least two scanners, in at least two processors operating in parallel, to obtain biometric data that uniquely identify the scanned biometric features; and

comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user;

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy and processing speed, at a lower cost than by using a single, larger biometric scanner.

3.   A method for performing biometric identity verification with improved accuracy, the method comprising the steps of:

scanning at least two fingerprints of a user simultaneously, using at least two practically identical biometric scanners;

processing data from the at least two scanners in at least one processor, to obtain biometric data that uniquely identify the scanned biometric features; and

comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user;

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy and processing speed, at a lower cost than by using a single, larger biometric scanner.

4.   A method as defined in claim 3, wherein the step of scanning at least two fingerprints includes scanning the fingerprints with at least two two-dimensional scanners.

5.   A method for performing biometric identity verification with improved accuracy, the method comprising the steps of:

scanning at least two fingerprints of a user simultaneously, using at least two practically identical one-dimensional scanners;

processing data from the at least two scanners in at least one processor including converter one-dimensional scanner data to two-dimensional fingerprint data, to obtain biometric data that uniquely identify the scanned biometric features; and

comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user;

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy and processing speed, at a lower cost than by using a single, larger biometric scanner.

scanners, and the step of processing the data from the scanners includes converting one-dimensional scanner data to two-dimensional fingerprint data.

6. A method as defined in claim 5, wherein the step of scanning at least two fingerprints uses a single, logically segmented one-dimensional scanner.

7. A system for performing biometric identity verification with improved accuracy, the system comprising:

at least two practically identical biometric scanners, for scanning at least two biometric features of a user simultaneously;

at least one processor, for processing data from the at least two scanners to obtain biometric data that uniquely identify the scanned biometric features; and

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comparison logic, for comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user;

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy and processing speed, at a lower cost than by using a single, larger biometric scanner.

8.   A system as defined in claim 7, wherein the at least one processor includes at least two processors operating in parallel.

9.   A system as defined in claim 7, wherein the scanners are fingerprint scanners, for scanning at least two fingerprints of the user simultaneously.

10.   A system as defined in claim 9, wherein the fingerprint scanners are two-dimensional scanners.

11.   A system for performing biometric identity verification with improved accuracy, the system comprising:

at least two practically identical one-dimensional fingerprint scanners, for scanning at least two fingerprints of a user simultaneously;

two processors ordinarily in parallel each including conversion logic, for processing data from the at least two scanners to obtain biometric data that

uniquely identify the scanned biometric features; including converting one-dimensional scanner data to two-dimensional fingerprint data; and

comparison logic, for comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user;

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy and processing speed, at a lower cost than by using a single, larger biometric scanner.

12. A system for performing biometric identity verification with improved accuracy, the system comprising:

at least two practically identical one-dimensional fingerprint scanners combined to form a single logically segmented one-dimensional scanner, for scanning at least two fingerprints of a user simultaneously;

two processors ordinarily in parallel each including conversion logic for processing data from the at least two scanners to obtain biometric data that uniquely identify the scanned biometric features, including converting one-dimensional scanner data to two-dimensional fingerprint data; and

comparison logic, for comparing the biometric data with reference biometric data recorded from the user during an enrollment procedure, to verify the identity of the user;

wherein simultaneous use of multiple biometric scanners provides desirable improvements in accuracy and processing speed, at a lower cost than by using a single, larger biometric scanner.